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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,604	12/02/2003	Masahiro Inoue	Q78683	2598
23373	7590	03/31/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			LAI, ANNE VIET NGA	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/724,604	<b>Applicant(s)</b> INOUE, MASAHIRO	
	<b>Examiner</b> Anne V. Lai	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10 and 14 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 5-7 is/are allowed.  
 6) ☒ Claim(s) 10 and 14 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 recites the limitation "said second power switch" in lines 13, 16 and 17.

There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Froschermeier** [US. 5,525,992] in view of **Tanaka** [US. 6,011,483] and further in view of **Burgess** [US. 6,031,465].

**Froschermeier** cites an on-vehicle DSRC 14 (figs. 1-5) comprising a radio unit, a data processing unit (ASIC), a battery (abstract), a first power switch for battery power saving (timer controlled switch 78, fig. 5, col. 8, l. 57-col. 9, l. 8), and a second power switch for manually overriding the power saving feature (col. 11, l. 62-67). **Tanaka** teaches a short-range communication apparatus having a plurality of switches to provide large battery saving effect (col. 4, l. 6-28). **Burgess** teaches an on-vehicle DSRC apparatus with power saving feature comprising a vibration detecting switch control unit to power on or off when the vibration is at a predetermined level

(programmable power up by vibration generated by three taps, and automatically power down during period of non-use; col. 2, l. 35-48; col. 5, lines 21-51). Since the detection level can be programmable, it would have been obvious setting a predetermined low level vibration to power off or setting a predetermined high level vibration to power up can be programmed by designer for each particular application based on the degree of vibration in the environment; and implementing a vibration control switch in addition to a timer controlled switch to the on-vehicle DSRC apparatus provides additional power saving to the battery.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over **O'Tool** [6,130,602] in view of **Matsuszewski** [US. 4,922,178].

In claim 14, **O'Tool** discloses an on-vehicle radio short-range communication apparatus for toll collection (col. 114, lines 5-67) comprising (figs. 3-5): a power switch 36 (wake up timer and logic; fig. 5) inserted in a power supply line extending between the battery 18 (figs. 3-4) and the radio /data processing unit (16; figs. 3-5) for power saving purpose (col. 43, lines 10-12; claim 1). **O'Tool** fails to disclose a connector to allow the battery to be removable. **Matsuszewski** teaches a battery assembly for a radio communication apparatus comprising a connector provided on the output side of the battery to allow the battery to be removable (fig. 4; battery detached, plug 403, col. 3, l. 21-39; claims 1-2). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement a connecting structure for the battery as taught by **Matsuszewski** to **O'Tool** apparatus as designer choice to provide the user an easy way to attach or remove the battery from the radio communication

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apparatus.

***Response to Arguments***

5. Applicant's arguments filed 3/15/06 have been fully considered but they are not persuasive.

a) In response to applicant argument that Burgess does not teaches turning on or off the power switch in response to vibration at a predetermined level. The examiner disagrees, Burgess does teach power up the apparatus at three taps and the vibration level can be programmable (see office action above). Since the level of vibration to detect can be programmable, a designer can design an apparatus to be power up or power down at any vibration level as will.

b) In response to applicant's arguments against the references individually (second power switch), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

c) In response to applicant's arguments that Bickley does not teach a connector on the output side of the battery to allow the battery to be removable. The examiner disagrees, Bickley teaches on column 5, lines 41-50, the battery can be connected to the tag by conductive node 48, therefore the battery must have a connector to electrically connected to the node 48. The examiner provides herein the references of Matsuszewsky [US. 4,922,178] and Nakamura [US. 6,529,714] that explicitly provide

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connectors existing on the battery pack to engage with the connector on the radio communication equipment.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

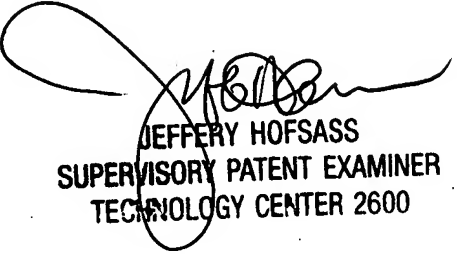
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne V. Lai whose telephone number is 571-272-2974. The examiner can normally be reached on 9:00 am to 6:30 pm, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass Jeffery can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AVL *ml*  
3/29/06

  
JEFFERY HOFSAASS  
SUPERVISORY PATENT EXAMINER  
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